Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims:

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (canceled)

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19. (canceled)

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23. (canceled)

24. (canceled)

25. (canceled)

26. (canceled)

27. (canceled)

28. (canceled)

29. (canceled)

30. (canceled)

31. (canceled)

32. (canceled)

33. (canceled)

34. (canceled)

35. (previously presented) A method for upgrading a communications network having a plurality of NEs which are not equipped with a routing function, comprising:

    a)   providing in the communications network a server;

    b)   implementing on the server a single instance of a routing function ~~shared among the~~ for controlling routing functions for said plurality of NEs such that said plurality of NEs can perform routing functions without upgrading the NEs to include routing functions themselves.

36. (canceled)

37. (previously presented) A method as defined in claim 35, including implementing said routing function by running a single instance of a routing protocol.

38. (original) A method as defined in claim 37, wherein the routing protocol is a distributed routing protocol.

39. (original) A method as defined in claim 38, wherein said routing protocol is selected in the group consisting of OSPF, IS-IS and PNNI and a routing protocol based on either one of OSPF, IS-IS and PNNI.

40. (original) A method as defined in claim 37, wherein the implementing of the routing function includes computing a path through the communications network for transporting data, wherein the path includes at least one of the plurality NEs as a source node for the path.

41. (original) A method as defined in claim 37, wherein the implementing of the routing function includes advertising the existence of each of the plurality of NEs to a peer routing instance in the communications network.

42. (original) A method as defined in claim 37, wherein the implementing of the routing function includes advertising link resources associated with each of the plurality of NEs to a peer routing instance in the communications network.

43. (original) A method as defined in claim 37, wherein the implementing of the routing function includes receiving advertisements from a peer routing instance in the communications network about existence of NEs, other than the plurality of NEs.

44. (original) A method as defined in claim 37, wherein the implementing of the routing function includes receiving advertisements from a peer routing instance in the communications network about link resources associated with NEs, other than the plurality of NEs.

45. (original) A method as defined in claim 37, wherein the implementing of the routing function includes acquiring information from the client NEs about link resources associated with each client NE.

46. (original) A method as defined in claim 35, comprising providing a database including true topology information about the plurality of NEs and allowing the routing function to interact with said database.

47. (original) A method as defined in claim 46, comprising providing the database in the server.

48. (previously presented) A method for providing a control plane to a communications network that does not have a control plane, said method comprising:

    a)   providing a server in the communications network that can exchange control messages with a plurality of NEs of the communications network, the NEs being part of a bearer plane of the communications network not previously controlled by a control plane;

b)　implementing on the server a routing function providing routing resources to the plurality of NEs without requiring the addition of a routing function to the NEs.

49. (original) A method as defined in claim 48, wherein the bearer plane excludes the server.

50. (canceled)

51. (canceled)

52. (canceled)

53. (canceled)

54. (canceled)